

ABSTRACT OF THE INVENTION

[94] A purine or pyrimidine analog having a reactive moiety not normally present in RNA is incorporated into RNA during a defined time period in a cell of interest, where the cell of interest comprises a phosphoribosyltransferase or nucleoside kinase that can specifically incorporate the analogs into the corresponding nucleotide. The nucleotide is then retained by the cell until it is synthesized in RNA. The labeled RNA can be specifically purified away from all other molecules and finds use in hybridization to microarrays; hybridization to blots; real time PCR; reverse transcriptase PCR, in vitro translation; cross-linking to interacting molecules, and the like.